INCH-POUND

MIL-PRF-64266/3A

6 January 2012

Superseding

MIL-PRF-64266/3

25 November 2008

### PERFORMANCE SPECIFICATION SHEET

CONNECTORS, FIBER OPTIC, CIRCULAR, RECEPTACLE STYLE,
MULTIPLE REMOVABLE TERMINI, SCREW THREADS,
JAMNUT MOUNTING, ENVIRONMENT RESISTING

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring fiber optic connectors described herein shall consist of this specification sheet and MIL-PRF-64266.

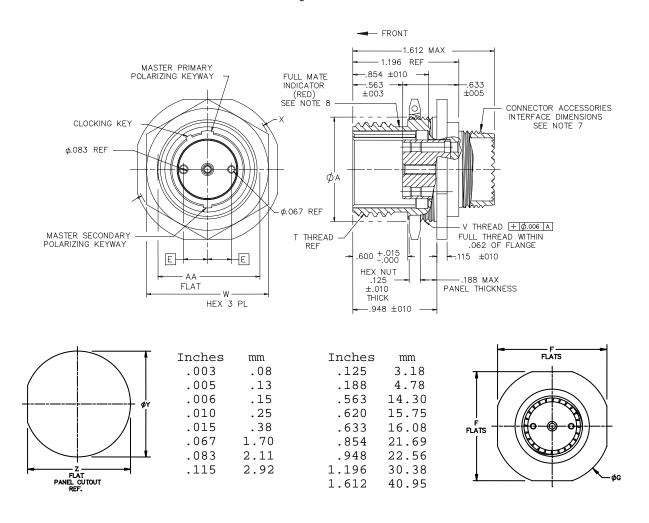


FIGURE 1. Jamnut receptacle connector.

AMSC N/A FSC 6060

| Shell<br>Size | A<br>dia<br>max   | F<br>flat        | G<br>dia<br><u>+</u> .010 | T<br>class 2A<br>blunt<br>start | V thread<br>class 2A | W<br>3 PLS                           |
|---------------|-------------------|------------------|---------------------------|---------------------------------|----------------------|--------------------------------------|
| 11            | .875<br>(22.23)   | 1.264<br>(32.11) | 1.358<br>(34.49)          | .75001P<br>2L-DS                | .875-20<br>UNEF      | 1.075<br>(27.30)<br>1.045<br>(26.54) |
| 13            | 1.000<br>(25.40)  | 1.264<br>(32.11) | 1.498<br>(38.05)          | .87501P<br>2L-DS                | 1.000-20<br>UNEF     | 1.205<br>(30.61)<br>1.171<br>(29.74) |
| 15            | 1.1875<br>(30.17) | 1.264<br>(32.11) | 1.671<br>(42.44)          | 1.0621P<br>2L-DS                | 1.1875-18<br>UNEF    | 1.392<br>(35.36)<br>1.358<br>(34.49) |
| 23            | 1.625<br>(41.28)  | 2.004<br>(50.90) | 2.098<br>(53.29)          | 1.5000-<br>.1P<br>2L-DS         | 1.625-18<br>UNEF     | 1.812<br>(46.03)<br>1.778<br>(45.16) |

| Shell<br>Size | X<br>Hex<br>corner<br>max | Y<br>Dia<br><u>+</u> .005 | Z<br>Flat<br><u>+</u> .005 | AA<br>Flat                           |
|---------------|---------------------------|---------------------------|----------------------------|--------------------------------------|
| 11            | 1.290<br>(32.77)          | .885<br>(22.48)           | .848<br>(21.54)            | .841<br>(21.36)<br>.832<br>(21.13)   |
| 13            | 1.435<br>(36.45)          | 1.010<br>(25.65)          | .973<br>(24.71)            | .966<br>(24.54)<br>.957<br>(24.31)   |
| 15            | 1.650<br>(41.91)          | 1.198<br>(30.43)          | 1.160<br>(29.46)           | 1.153<br>(29.29)<br>1.144<br>(29.06) |
| 23            | 2.093<br>(53.16)          | 1.630<br>(41.40)          | 1.593<br>(40.46)           | 1.587<br>(40.31)<br>1.578<br>(40.08) |

See notes on next page

FIGURE 1. Jamnut receptacle connector - Continued.

#### NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only.
- 3. Metric equivalents (mm) are in parentheses.
- 4. Dimensions apply to plated/finished part.
- 5. Mating key positions and dimensions are shown on figure A-3 of MIL-PRF-64266.
- 6. Connector receptacle interface dimensions shall be in accordance with MIL-PRF-64266, figure A-2.
- 7. Back end connector design for attachment of non-rotatable backshell. Connector backshell accessory interface shall be in accordance with MIL-PRF-64266, figure A-6.
- 8. The color band shall be yellow and the full mate indicator shall be red in accordance with EIA-359 for all shell sizes. Dimension criteria for full mate indicator are shown in appendix A, figure A-2 of MIL-PRF-64266.
- 9. Insert retention mechanism not shown.
- 10. For connector insert arrangements and interface dimensions, see appendix B, figures B-1 through B-6 of see MIL-PRF-64266.

FIGURE 1. Jamnut receptacle connector - Continued.

### **REQUIREMENTS:**

Dimensions and configurations: See figure 1 and MIL-PRF-64266 appendix A, figure A-2, and figure A-4.

Weight (without termini): See table I

TABLE I. Weight (without termini).

| Sell size | Weight, max. |         |  |
|-----------|--------------|---------|--|
| Sell Size | ounces       | grams   |  |
| 11        | 2.0          | 56.7    |  |
| 13        | 2.5          | 70.875  |  |
| 15        | 3.0          | 85.05   |  |
| 23        | 4.3          | 121.905 |  |

Fiber optic cable:

Cable diameter: .094 inch (2.39 mm) maximum.

Protective caps: Each connector shall be supplied with protective caps over the front and rear portions of the connector.

Insert arrangement: See appendix B of MIL-PRF-64266 for desired shell size. Insert shall be marked with the identification numbers of the insert cavity positions on both the front and rear faces.

Termini: Genderless. See MIL-PRF-29504/18. For dummy terminus, see MIL-PRF-29504/19. For keyed terminus, see MIL-PRF-29504/20.

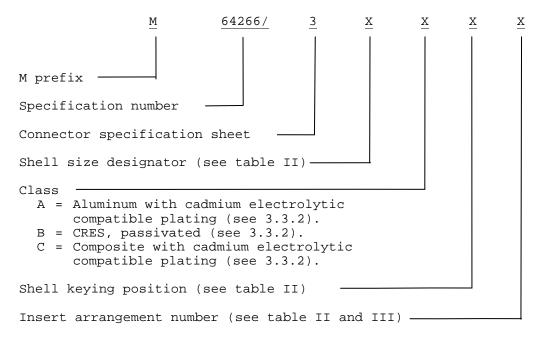
Alignment Sleeve retainer (ASR): A MIL-PRF-64266/9 ASR shall be installed in the receptacle as part of this PIN.

Cleaning procedures: Each shipment of connectors shall include recommended cleaning procedures. The following wording or equivalent is recommended: "To clean, use lint free wipe dampened with alcohol and blow dry with air".

Shell polarization: 1 through 12 keyway positions. See MIL-PRF-64266 appendix A, figure A-3.

# Marking:

Part or Identifying Number (PIN): Mark on flange of connector receptacle (see table II and III).



PIN Examples: M64266/3B11 M64266/3BAC4

TABLE II. PIN designators.

| Shell<br>Size | Shell size<br>designator | Shell key position designator $\frac{1}{2}$ | Insert<br>arrangement<br>number |
|---------------|--------------------------|---|---------------------------------|
| 11            | В                        | 1 through 9<br>A, B and C                   | 1, 2, 3, or 4                   |
| 13            | С                        | 1 through 9<br>A, B and C                   | 1, 2                            |
| 15            | D                        | 1 through 9<br>A, B and C                   | 1, 2, 3, or 4                   |
| 23            | Н                        | 1 through 9<br>A, B and C                   | 1, 2                            |

See note on next page

### TABLE II. PIN designators.

TABLE III.

1/ Shell key position designator "1" is the common shell key position and the one to specify when there is no need to have multiple connectors with multiple shell key positions.

| Insert      | Terminus  | Number of insert cavities (termini pe |
|-------------|-----------|---------------------------------------|
| arrangement | non-keyed | for each shell size $\underline{2}$   |

| Insert                | Terminus    | Number of insert cavities (termini per connector)  for each shell size $\frac{2}{2}$ |    |    |    |  |
|-----------------------|-------------|--|----|----|----|--|
| arrangement<br>number | non-keyed   |  |    |    |    |  |
|                       | /keyed $1/$ | 11   | 13 | 15 | 23 |  |
| 1                     | M29504/18   | 2  | 6  | 8  | 36 |  |
| 2                     | M29504/18   | 4  | NA | 10 | NA |  |
| 3                     | M29504/20   | 2  | 6  | 8  | 36 |  |
| 4                     | M29504/20   | 4  | NA | 10 | NA |  |

Insert arrangement.

#### Notes:

- 1/ Non-keyed terminus is a MIL-PRF-29504/18 terminus with a domed end face and PC polish. Keyed terminus is a MIL-PRF-29504/20 terminus that will be terminated with a domed end face with either a PC or an APC polish.
- 2/ Insert arrangement number is based on both the terminus type (non-keyed or keyed) and number of cavities in the insert (number of termini that can be placed into the connector).

Sealing gasket or o-ring: The receptacle shall include a sealing gasket or o-ring to seal between the receptacle flange and the mounting panel.

Mating counterpart: Plug connectors specified in MIL-PRF-64266/2.

Installation and removal tools: As specified in NAVSEA drawing 8283460. A copy of this document can be obtained at web site: https://fiberoptics.nswc.navy.mil.

For qualified products listing, quality conformance, and periodic inspections, dummy termini shall be used in all unused cavities.

Changes from previous issue: The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. This is done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of the document based on the entire contents irrespective of the marginal notation and relationship to the last previous issue.

Referenced documents. In addition to MIL-PRF-64266, this specification sheet references the following documents:

> MIL-PRF-29504/18 MIL-PRF-64266/9 MIL-PRF-29504/19 NAVSEA drawing 8283460 EIA-359 MIL-PRF-29504/20 MIL-PRF-64266/2

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Custodians:

Army - CR
Navy - SH
Air Force - 85
DLA - CC

Review activities:

Army - MI
Navy - AS
Air Force - 13, 19, 93, 99
NASA - NA
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NOTE: The activities listed above were interested in this document on the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.daps.dla.mil.